

### REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated May 22, 2003 (U.S. Patent Office Paper No. 5). In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

#### Status of the Claims

As outlined above, claims 1 to 15 are pending in this application, wherein claims 1 and 6 to 15 are being amended to more particularly point out and distinctly claim the present invention.

#### Additional Amendments

The specification is being amended to correct formal errors and to better disclose and describe the features of the present invention as claimed. Applicants have amended the Abstract of Disclosure and corrected the informalities pointed out by the Examiner on page 4, lines 1 to 6 of the office action.

The drawings are being amended to correct formal errors and to better disclose and describe the features of the present invention as claimed.

Applicants have reorganized the drawings so as to avoid double submissions, and to more clearly and better disclose and describe the features of the present invention as claimed. The applicants have also amended the drawings in compliance with the requirements recited in 37 C.F.R. § 1.84. The Examiner is respectfully asked to consider these changes and to withdraw the objections regarding the drawings.

Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

#### Formal Objections or Rejections

Claims 10, 13, and 14, were objected to under 37 C.F.R. §1.75(c) for being of improper dependent form and for failing to further limit the subject matter of a previous claim. Applicants respectfully traverse the rejection.

Applicants amended claims 10, 13, and 14 and respectfully submit that the claims in their amended form further limit the subject matter of claim 1. Support for the amendment

made to claim 10 can be found in the specification on page 13, lines 3 through 8 and in the description of the several preferred embodiments.

Claims 1, 7, 9, and 12 through 14, were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants respectfully traverse the rejection.

Applicants have amended claim 1 to correct the formal errors, and to better recite the features of the present invention. Claim 7 has been amended to properly provide antecedent basis for the element "screw portion". Claim 9 has been amended to properly provide antecedent basis for the element "sub-arms".

The Examiner alleged in the office action page 5, lines 19 to 21, regarding claim 12, that "claim 12 recites the limitation "the viscoelastic body" and "there is insufficient antecedent basis for this limitation". Claim 12 is being amended to depend from claim 11.

In claims 13 and 14, the applicants have deleted the phrase "or similar function" that was rendering the claims indefinite.

In addition, all element identifiers in the claims have been removed.

Claims 1, 3 - 7, and 10 - 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Izdebski *et al.*, U.S. Patent No. 4,290,331 (further, the '331 patent) in view of applicant's admitted prior art. Applicants respectfully traverse the rejection.

Claim 1 recites a pickup apparatus of a piano, comprising a sensor member having a first contact member which is in contact with a stationary member wherein the stationary member is a cast-iron plate of a piano body and a second contact member which is in contact with a sound source member wherein the sound source member is a sound board of the piano body, and a length-adjusting mechanism provided one or both first and second contact members, wherein vibration force applied from the stationary member and the sound source member is converted into an electric signal for output.

The Examiner alleges on page 6 and 7 of the office action that the '331 patent discloses "a threaded contact member of the instrument and thereby adjusting the pressure applied to the sensor means." The Examiner also alleges that pick-up 7 which includes a piezo-electric crystal 9 positioned between a contact post 11 and a screw 12, as disclosed in the '331 patent in col. 1, lines 52 to 60, anticipates the recitation of claim 1.

The '331 patent recites in col. 1, line 52 through col. 2, line 4: "A pick-up generally 7 has a housing 8 glued to the bridge 5 beneath the strings 3. The pick-up 7, which is shown in

more detail in FIG. 3, includes a piezo-electric crystal 9 which is mounted in a foam rubber mounting 10. An additional foam block 10' is also provided to bias the crystal 9 away from the bridge 5 so that when a screw 12 is unscrewed a wooden post 11 glued to the crystal 9 tends to move away from the bridge 5. The piezo-electric crystal 9 is glued on one face to the wooden post 11 of which the free end, in use, contacts the bridge 5 of the guitar. The screw 12 passes through a threaded aperture 13 in the housing and bears against a face of the crystal 9 remote from that carrying the post 11. By rotating the screw 12, the pressure with which the crystal 9 is applied to the bridge 5 through the post 11 can be varied. The crystal 9 also includes a pair of electrodes (not shown) coupled to leads for carrying an electrical signal representative of the vibrations of the piezo-electric crystal 9. The leads may be connected to the input of an amplifier in the conventional manner."

Applicants respectfully submit that the '331 patent fails to disclose, teach or suggest "a stationary member is a cast-iron plate of a piano body" or a "sound source member that is a sound board of the piano body". Rather, the '331 patent is directed to guitars, and the only passing reference made to other musical instruments other than a guitar and their constituting elements is in column 2, lines 17 to 18 wherein: "The pick-up may be used with other musical instruments such as violins for example." Applicants would submit that one of skill in the art would not interpret the '331 patent as referring to pickup apparatus of a piano.

Based on the above, Applicants respectfully submit that the '331 patent fails to disclose or suggest a first contact member which is in contact with a stationary member wherein the stationary member is a cast-iron plate of a piano body, and a second contact member which is in contact with a sound source member wherein the sound source member is a sound board of the piano body, similar to those of the present invention.

Even more, neither the primary reference of the '331 patent nor the secondary reference of the admitted prior art provides any disclosure or teaching that would motivate the application of the '331 structure to a piano. Also, neither reference provides any motivation for their combination so as to embody all the elements of the present invention as now claimed. The present invention as claimed in claim 1 is distinguishable over the cited prior art.

Claims 3 to 7, and 10 to 15 are dependent from and add features to claim 1 discussed above. In view of the above arguments, Applicants contend that the claims are allowable for at least the same reasons as those applicable to claim 1 and for reasons contained therein.

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Izdebski *et al.*, U.S. Patent No. 4,290,331 (further, the '331 patent) in view of Applicant's admitted prior art and in further view of well known prior art. Applicants respectfully traverse the rejection.

Claim 2 depends from and adds features to independent claim 1. Claim 1 has been analyzed above and found allowable over the same references cited by the Examiner against claim 2, Izdebski *et al.* and applicant's admitted prior art.

Further, the Examiner alleges on page 11 of the office action that "within the concept of flushly securing one surface to another, the concept of including a ball joint type angle adjusting mechanism is well-known in the art.... To one of ordinary skill in the art at the time of the invention was made, it would have been obvious to modify the invention of Izdebski in view of applicants admitted prior art by modifying the post of Izdebski by adding an adjustable head. Such a modification would have been desirable because it would have ensured the same relative amount of contact during use between the sounding board and the post 11 of Izdebski." Applicants respectfully disagree.

Claim 2 recites a pickup apparatus for a piano wherein one or both of said first and second contact members are provided with angle-adjusting mechanisms capable of contacting with said stationary member or said sound source member at arbitrary angle.

Applicants carefully reviewed the '331 patent and can not find in the patent any suggestion to modify the invention by "modifying the post ... by adding an adjustable head" nor about the desirability of such modification.

Based on the above Applicants respectfully submit that claim 2 is allowable over the prior art.

Claims 8 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Izdebski *et al.*, U.S. Patent No. 4,290,331 (further, the '331 patent) in view of Applicant's admitted prior art as applied above and further in view of Johnson, U.S. Patent No. 4,022,100 (further, the '100 patent). Applicants respectfully traverse the rejection.

The Examiner alleges on page 12 of the office action that the '100 patent discloses a fastener for a hollow wall that includes rotatable arms connected to a main plate that are used to secure the overall device to the wall.

Claims 8 and 9 depend from and add features to allowable claim 1. Therefore, claims 8 and 9 are allowable over the '331 patent in view of applicants admitted prior art at least for the reasons expressed above in connection with the rejection regarding claim 1.

Claims 8 and 9 disclose a pickup apparatus for a piano wherein the first contact member is in contact with bar-like sub-arms rotatably mounted to opposite ends of the main arm member, and the other ends of the sub-arms are in contact with a stationary member of the piano body. Further, amended claim 9 discloses for the pickup apparatus of a piano that in the first contact member a plurality of sub-arms rotatably mounted to the opposite ends of the main arm member are provided at their other ends with projecting contact portions.

Applicants carefully reviewed the '100 patent and cannot find any suggestion in the patent that the fastener might be used within a piano. Further claim 8 discloses "bar-like sub-arms". This feature is not present in the '100 patent. Regarding claim 9, the "plurality of sub-arms ... with projecting contact portions" are not contemplated by the '100 patent. Based on the above applicants respectfully submit that claims 8 and 9 are patentable over the prior-art made of record.

#### CONCLUSION

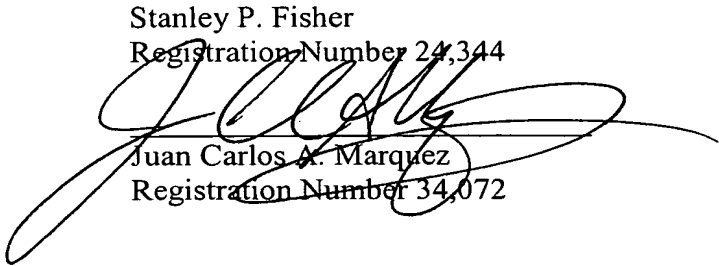
In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to

contact the Applicant's undersigned representative at the address and phone number indicated below.

Respectfully submitted,

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